



## **Reduction sleeves for hydraulic chucks**

Outstanding runout accuracy and highest clamping force for peripheral or internal cooling applications



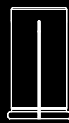
**Swiss quality standard**

Our products marked Swiss made are manufactured at our headquarters in Tenniken, Switzerland.

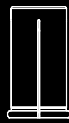
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**High performance  
reduction sleeves  
for hydro chucks**

HS



HS-CF  
with coolant flush



HS-MB  
Micro-Bore



# High performance reduction sleeves

Reduction sleeves are designed to fit hydro chucks of different manufacturers. They are specially suited for high-precision clamping of cylindrical tool shanks.

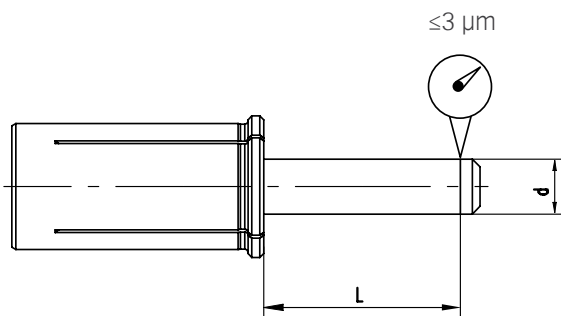
**Reduction sleeves for hydro chucks** Our reduction sleeves are designed to fit hydro chucks of different manufacturers. They are specially suited for high-precision clamping of cylindrical tool shanks per DIN 6535 form HA, HB and HE, as well as tool shanks per DIN 1835 form B, C, D and E.

The special design of REGO-FIX reduction sleeves allows an efficient use of coolant through cutting tools. This self-sealing system works with the most common hydraulic expansion chucks.

- Correct assembly** Improper assembly can damage the concentricity of the reduction sleeve.
- // Insert tools the full length of the reduction sleeve
  - // Only clamp h6 tool shanks
  - // Do not clamp reduction sleeve without a tool, as this could result in a damaged reduction sleeve

## Concentricity (TIR) of REGO-FIX HS reduction sleeves

Clamping diameter d [mm]			max. TIR
> d	≤d	L	[mm]
3,0	6,0	16	0,003
6,0	10,0	25	0,003
10,0	18,0	40	0,003
18,0	26,0	50	0,003



## Reductions sleeves for hydro chucks HS

### Features and benefits

#### Accurate precision

Runout TIR ≤3 μm

#### High flexibility

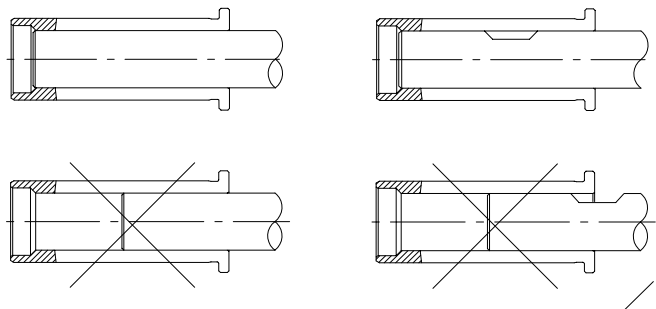
Clamp different sleeve shank diameters in hydro chucks: 6, 8, 12, 20, 25 and 32 mm.

#### Standard version HS suited for internal cooling

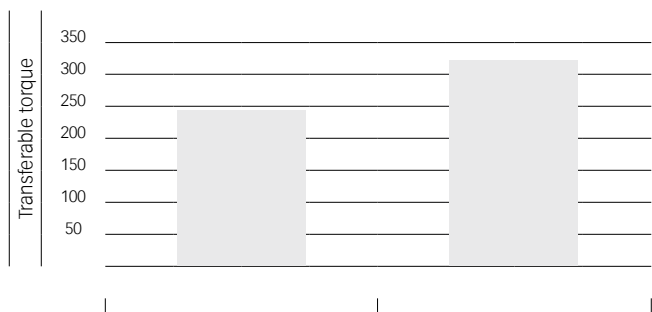
Metal-to-metal seal for cutting tools with internal coolant channels.

#### HS-CF suited for peripheral cooling

The coolant flush reduction sleeves HS-CF can be used for peripheral cooling due to their coolant channels.



## Comparison of transferable torque at Ø 20 mm













**Direct clamping**  
Shank Ø 20 mm in  
toolholder Ø 20 mm

**Reduction sleeve 32/20**  
Shank Ø 20 mm in  
toolholder Ø 32 mm









# Reduction sleeves HS, HS-CF and HS-MB

A wide standard range of high-precision reduction sleeves: cutting tools with shanks from 1.0 mm to 25 mm can be reliably and securely clamped in any hydraulic chuck.

## Metric

	HS 6	HS 8	HS 12-MB	HS 12	HS 12-CF	HS 20	HS 20-CF	HS 25	HS 32	HS 32-CF
Outer diameter	Ø 6	Ø 8	Ø 12	Ø 12	Ø 12	Ø 20	Ø 20	Ø 25	Ø 32	Ø 32
Shank diameter	1-4 mm	6 mm	1-2.5mm	3-10mm	3-8mm	3-18mm	3-16mm	3-20mm	3-25mm	6-25mm
Shank tolerance [mm]	All reduction sleeves are designed for tools with shank tolerance h6 or more accurate									
For internal coolant	•	•		•		•		•	•	
For peripheral coolant			•		•		•			•
Technical illustrations of cooling										
Safety note	Never clamp reduction sleeves without a tool, it can be permanently damaged									

## Inch

	HS 12	HS 20	HS 25	HS 32	HS 1/2"	HS 3/4"	HS 1"	HS 1 1/4"
Outer diameter	Ø 12 mm	Ø 20 mm	Ø 25 mm	Ø 32 mm	Ø 1/2"	Ø 3/4"	Ø 1"	Ø 1 1/4"
Shank diameter	1/8-3/8"	1/8-5/8"	1/8-13/16"	3/16-1"	1/8-3/8"	1/8-5/8"	1/8-3/4"	3/16-1"
Shank tolerance [mm]	All reduction sleeves are designed for tools with shank tolerance h6 or more accurate							
For internal coolant	•	•	•	•	•	•	•	•
Technical illustrations of cooling								
Safety note	Never clamp reduction sleeves without a tool, it can be permanently damaged							

# Reduction sleeves HS and HS-CF [metric]

Ø bore [mm]	Part no.									
	HS 6	HS 8	HS 12-MB	HS 12	HS 12-CF	HS 20	HS 20-CF	HS 25	HS 32	HS 32-CF
1,0	1906.01000	-	1912.01009*	-	-	-	-	-	-	-
1,5	-	-	1912.01509*	-	-	-	-	-	-	-
2,0	1906.02000	-	1912.02009*	-	-	-	-	-	-	-
2,5	-	-	1912.02509*	-	-	-	-	-	-	-
3,0	1906.03000	-	-	1912.03000	1912.03002	1920.03000	1920.03002	1925.03000	1932.03000	-
4,0	1906.04000	-	-	1912.04000	1912.04002	1920.04000	1920.04002	1925.04000	1932.04000	-
5,0	-	-	-	1912.05000	1912.05002	1920.05000	1920.05002	1925.05000	1932.05000	-
6,0	-	1908.06000	-	1912.06000	1912.06002	1920.06000	1920.06002	1925.06000	1932.06000	1932.06002
7,0	-	-	-	1912.07000	-	1920.07000	-	1925.07000	1932.07000	-
8,0	-	-	-	1912.08000	1912.08002	1920.08000	1920.08002	1925.08000	1932.08000	1932.08002
9,0	-	-	-	1912.09000	-	1920.09000	-	1925.09000	1932.09000	-
10,0	-	-	-	1912.10000	-	1920.10000	1920.10002	1925.10000	1932.10000	1932.10002
11,0	-	-	-	-	-	1920.11000	-	-	1932.11000	-
12,0	-	-	-	-	-	1920.12000	1920.12002	1925.12000	1932.12000	1932.12002
13,0	-	-	-	-	-	1920.13000	-	-	1932.13000	-
14,0	-	-	-	-	-	1920.14000	1920.14002	1925.14000	1932.14000	1932.14002
15,0	-	-	-	-	-	1920.15000	-	-	1932.15000	-
16,0	-	-	-	-	-	1920.16000	1920.16002	1925.16000	1932.16000	1932.16002
17,0	-	-	-	-	-	-	-	-	1932.17000	-
18,0	-	-	-	-	-	1920.18000	-	1925.18000	1932.18000	1932.18002
19,0	-	-	-	-	-	-	-	-	1932.19000	-
20,0	-	-	-	-	-	-	-	1925.20000	1932.20000	1932.20002
22,0	-	-	-	-	-	-	-	-	1932.22000	-
25,0	-	-	-	-	-	-	-	-	1932.25000	1932.25002

\*not metallic sealing



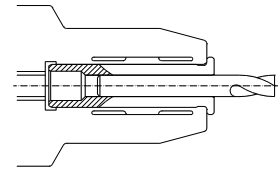


# Reduction sleeves HS [inch]

Ø bore		Part no.			
[[decimal "]]	[inch]	HS 12	HS 20	HS 25	HS 32
0,125	1/8"	1912.03181	1920.03181	1925.03181	-
0,1875	3/16"	1912.04761	1920.04761	1925.04761	1932.04761
0,25	1/4"	1912.06351	1920.06351	1925.06351	1932.06351
0,3125	5/16"	1912.07941	1920.07941	1925.07941	1932.07941
0,375	3/8"	1912.09521	1920.09521	1925.09521	1932.09521
0,4375	7/16"	-	1920.11111	1925.11111	1932.11111
0,5	1/2"	-	1920.12701	1925.12701	1932.12701
0,5625	9/16"	-	1920.14291	1925.14291	1932.14291
0,625	5/8"	-	1920.15881	1925.15881	1932.15881
0,6875	11/16"	-	-	1925.17461	1932.17461
0,75	3/4"	-	-	1925.19051	1932.19051
0,8125	13/16"	-	-	1925.20631	1932.20631
0,875	7/8"	-	-	-	1932.22221
0,9375	15/16"	-	-	-	1932.23811
1,0	1"	-	-	-	1932.25401

## Expert advice

The outer diameter of the reduction sleeves corresponds to each type, e.g. HS 12 equals diameter 12 mm.



HS section drawing

Ø bore		Part no.			
[[decimal "]]	[inch]	HS 1/2"	HS 3/4"	HS 1"	HS 1 1/4"
0,125	1/8"	1913.03182	1919.03182	1926.03182	-
0,1875	3/16"	1913.04762	1919.04762	1926.04762	1931.04762
0,25	1/4"	1913.06352	1919.06352	1926.06352	1931.06352
0,3125	5/16"	1913.07942	1919.07942	1926.07942	1931.07942
0,375	3/8"	1913.09522	1919.09522	1926.09522	1931.09522
0,4375	7/16"	-	1919.11112	1926.11112	1931.11112
0,5	1/2"	-	1919.12702	1926.12702	1931.12702
0,5625	9/16"	-	1919.14292	1926.14292	1931.14292
0,625	5/8"	-	1919.15882	1926.15882	1931.15882
0,6875	11/16"	-	-	1926.17462	1931.17462
0,75	3/4"	-	-	1926.19052	1931.19052
0,8125	13/16"	-	-	-	-
0,875	7/8"	-	-	-	-
0,9375	15/16"	-	-	-	-
1,0	1"	-	-	-	1931.25402

## Expert advice

Our chip cover is ideally suited for the removal of chips. The cover can simply be clicked-in at the head of our reduction sleeves.

## Expert advice

The coolant flush reductions sleeves HS-CF can be used for peripheral cooling due to their coolant channels.

Easy removing of the reduction sleeve from hydro chucks thanks to the extractor EHS.



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